



A River Runs through It Land Use Scenarios

Scenario 1

You are a farmer who grows wheat, barley, and oats. Your farm is along the riverbank. In order to save money in equipment costs, you have chosen to use a no-till method of farming, which means that you do not plow the land that you farm. To keep your land free of unwanted plant growth between crops, you apply herbicides regularly.

Scenario 2

You are the owner of the Riverview Shopping Mall. This mall has many paved parking lots and concrete sidewalks. There is even a sidewalk along the riverbank, where shoppers can relax and eat with a lovely view of the river. There is extensive landscaping around your mall, with lush trees, shrubs, and flowers. You instruct your maintenance staff to apply fertilizers regularly to keep the landscaping lush.

Scenario 3

You are the owner of the Down by the Riverside golf course. Your course has 18 holes of manicured fairways and greens, all of which are kept green by the frequent application of fertilizers and herbicides. Many of the fairways slope to the river's edge, offering golfers an extra challenge, as well as a beautiful view.

Scenario 4

You are the developer of the Homes on the River subdivision. This subdivision contains 25 homes owned by high-income families. Many of these families have dogs and cats that enjoy the well-manicured lawns that surround each home. Most of the homeowners apply fertilizers and herbicides regularly to their lawns to keep them beautiful. The roads and driveways in the subdivision are paved. The trees and vegetation that once lined the riverbank have been removed in order to give residents a view of the river.

Scenario 5

You are the owner of the Big River Marina. You have numerous concrete boat ramps that descend directly into the river, where boaters can easily gain access to the water. You also sell oil and gasoline from a dock in the river, where boaters can fill their boats with fuel without leaving the water.

Scenario 6

You are a contractor assigned to build a new subdivision of riverfront homes. You are currently in the beginning stages of construction. Your bulldozers have dug up the soil where the basements of these homes will eventually be built. There is a tremendous area of bare, exposed soil alongside the river.

Scenario 7

You are a farmer who grows corn. Corn extracts a tremendous amount of nutrients from the soil. Since you plant corn in the same fields every year, the soil does not always have enough nutrients to support the growth of the corn. Therefore, you apply a great deal of fertilizers (which contain nutrients) to the soil, as well as to the leaves of the corn plants when they begin to grow. One of your fields slopes down to the edge of the river. You plow this field in rows that are perpendicular to the river. Rainwater often runs very fast down the gullies created by these rows.

Scenario 8

You are the owner of a forestry company that makes its money by cutting down trees along the river and selling them to lumber companies. You bring in several bulldozers and chainsaws that plow down and cut the trees. This equipment runs on gasoline and produces a large amount of exhaust. To ensure that you will have more trees to cut in the future, you replant the land in pines after you have finished clearing it.

Scenario 9

You are the owner of a chicken farm. Chicken manure contains a very high amount of nitrogen. You have about 20 chicken coops. When it is time for you to clean them, you shovel the manure and pile it on the edges of fields that drain into the river.

Scenario 10

You are the owner of a fishing pier. Many tourists and locals use this pier for sport fishing. Your dock contains a store that sells bait, tackle, and refreshments. Many of the people who fish from your pier catch an average of 20 fish a day. Those that are too small to keep are always thrown back. There is also a spot beside your pier where guests can clean their fish. The remains of the fish are dumped back into the river. There is also a paved parking lot beside your pier that extends very close to the river's edge.